the lower wound, leaving the gut with a skin covering. The anastomosis lay directly behind the peritoneal wound in the abdominal cavity. The distal arm of the loop passed in a direct line from the upper wound beneath the skin and back into the abdomen. When necessary, regurgitation could be prevented by placing a compressing-pad over the skin between the two wounds.

On the fourth day after the operation the intestine was opened with the cautery. The patient was fed with milk, soup, wine, eggs, etc., and discharged at the end of three weeks. Eight weeks after the operation she died. She had continued to feed herself by the fistula and by mouth.

Albert has performed a second such operation. The patient was a woman twenty years of age, who had suffered from contraction of the œsophagus and stomach after swallowing lye about a month before. She was so weak that she perished a few hours after the operation. The autopsy showed extensive ulceration of the stomach and stenosis of the pylorus. Albert is of the opinion that this method is more easily carried out than the operation of Maydl, and will find application especially in such cases as the last.

JAMES P. WARBASSE (Brooklyn).

III. A Case of Perforation of a Chronic Ulcer of the Duodenum Successfully Treated by Excision. By HENRY PERCY DEAN, F.R.C.S. (London). A married woman, aged twenty-seven years, was admitted into the London Hospital, February 17, 1894, with intense pain over the whole of the abdomen, perhaps slightly more marked in the epigastric regions: the patient felt very ill, and her expression was exceedingly anxious. Vomiting occurred every few minutes. The pulse was 120, feeble and regular. The respirations were rapid and irregular, both in force and rhythm. The tongue was slightly furred and very dry. There was uniform tenderness over the entire abdomen, the distention was moderate in degree. The temperature was 100.6° F.

For about a fortnight she had suffered from pain in the chest and

pit of stomach. Her bowels had not been opened for seven or eight days. About twenty-four hours before admission to the hospital the patient suddenly became much worse, feeling a severe pain in the pit of the stomach, and a sensation of intense weakness. This was soon followed by vomiting, repeated at frequent intervals.

It was decided to operate at once. The patient was taken to the operating theatre, anæsthetized with chloroform, and an incision about three inches long was made immediately below the umbilicus. On opening the peritoneal cavity a quantity of purulent fluid escaped, and coils of intestine, somewhat distended, intensely congested, and covered in places with flakes of lymph, protruded through the wound. No evidence of any mechanical obstruction appearing, the incision was prolonged upward to the ensiform cartilage. Some flakes of lymph were found in the region of the gall-bladder, and in the centre of one of these flakes some gas bubbles formed a kind of froth. On inserting a probe into the froth it passed into a cavity, which on further examination was found to be the duodenum, the perforation being situated on the anterior aspect about three-quarters of an inch beyond the pylorus. Around the perforation a distinct induration could be felt. By means of scissors this indurated area was excised. The portion removed was elliptical in shape, measuring one and a quarter inches in its long axis, which was parallel with the transverse axis of the gut. The portion excised was found to include the ulcer and a margin of healthy mucous membrane. In the centre of the ulcer was a perforation about two millimetres in diameter. The floor of the ulcer was white, and the edge of the ulcer was bounded by apparently healthy mucous membrane. The elliptical opening thus made into the duodenum was sewn up by silk sutures according to Lembert's method. The peritoneal cavity was washed out with warm, weak, boracic lotion, well sponged, and the wound sewn up by stitches passing through the whole thickness of the abdominal wound. The operation lasted fifty minutes.

After the operation the patient was allowed nothing by the mouth. She was fed solely *per rectum* by nutrient enemata and sup-

positories for seventeen days. To allay thirst, two ounces of warm water were occasionally injected into the rectum. The patient rapidly improved, was given liquid food by the mouth on the eighteenth day, and solid food on the twenty-eighth day. The abdominal wound healed by first intention, and on March 19—that is, thirty days after the operation—the patient was walking about the ward, going into the garden, and eating ordinary food.

At the end of another month, however, she suddenly developed symptoms of obstruction of the bowel, and was subjected to a second abdominal section. The great omentum was found adherent to the wound, and at the lower part of the scar a band could be traced to a coil of intestine, and this band had caused a kink in the gut sufficient to produce complete obstruction. The band was attached to the gut about six inches above its entrance into the cæcum. The coils of intestine on the proximal side of the band were greatly distended and very congested. On the distal side of the band the intestine was collapsed. The band was removed, and immediately afterwards the collapsed coils became distended, showing that the obstruction had been relieved. The peritoneal cavity, which contained some blood-stained fluid, was washed out with warm boracic lotion, and the wound sewn up by silkworm-gut stitches. The operation lasted forty-five minutes.

The patient recovered to a slight extent from the shock of the operation, but never thoroughly rallied. She gradually became weaker, and died about thirty-six hours after the operation.

Post-mortem Examination.—On opening the abdomen a considerable amount of lymph was found upon the intestines, and the peritoneal cavity contained a quantity of turbid fluid. About three inches above the attachment of the band to the small intestine was a perforation from which the intestinal contents escaped. A little higher up was another perforation. On opening the intestine it was found that each perforation was in the centre of a small ulcer. The ulcers were evidently of very acute and recent formation, as the whole thickness of the intestinal wall at these spots was necrosed. There

were several other necrotic patches within eighteen inches of the obstructed point. For about half an inch from the pylorus the duodenum was thinner than normal, and the peritoneum over it was puckered. The duodenum was quite healthy, and presented no traces of past or recent ulceration.—*British Medical Journal*, May 12, 1894.

IV. On Omphalo-Properitoneal Hernia. By Drs. DEMONS and BINAUD. These authors describe a variety of hernia *à double sac*, characterized by the existence of a diverticular sac between the peritoneum and the posterior layer of the abdominal wall, and communicating with the principal sac of the hernia. This variety of hernia was first described in France by Pelletan (1810) and Parize (1852). It has since been written of in Germany by Froriep, Janzer, and Streubel; and in England by Cock, Birkett, and Hilton. It was not well known, however, until the two important memoirs of Krönlein were published, the first in 1876 (*Archiv für klinischen Chirurgie*, Bd. XIX, p. 408) and the second in 1880 (*Archives générales de Médecine*, Tome II, p. 414).

The cases collected by Krönlein made a total of twenty-four. Twenty-three of these were of the inguino-properitoneal variety, and a single case was of cruro-properitoneal hernia. He had not found any report of this anomaly occurring in connection with umbilical hernia.

The honor of first recognizing a case of omphalo-properitoneal hernia is due to Professor Félix Terrier (*Considérations cliniques sur la hernie ombilicale étranglée: in Bulletin et Mém. de la Société de Chirurgie de Paris*, 1881, p. 19). The case was that of a woman, seventy-seven years of age, who had carried a large irreducible umbilical hernia for over twenty years. Symptoms of strangulation developed, and an operation was done on the fifth day. The umbilical sac contained strangulated intestine and omentum; and communicating with this sac was a second independent sac lying behind the abdominal wall and containing deeply congested intestine. The gut was relieved, but the patient died after a few hours.